

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, DCC 20231 www.uspto.gov

APPLICATION NO.	HLING DATE	FIRST NAMED INVESTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/722,644	11/28/2000	Jun Koide	35.C14946	4570	
5514	7590 04.23/2003				
FITZPATRICK CELLA HARPER & SCINTO			EXAMINER		
30 ROCKEFI NEW YORK	ELLER PLAZA , NY 10112		JOHNSON, JONATHAN J		
			ART UNIT	PAPER NUMBER	
			1725	12	
			DATE MAILED: 04/23/2003	1.2	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		AS:	5
	Application No.	opplicant(s)	
	09/722,644	KOIDE, JUN	
Office Action Summary	Examiner	Art Unit	
	Jonathan Johnson	1725	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the privisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days, and if NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by second and patent term adjustment. See 37 CFR 1.704(b).  Status	DN. R 1.136(a). In no event, however, may a n. a reply within the statutory minimum of this eriod will apply and will expire SIX (6) MOI tatute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on	<u>02 April 2003</u> .		
2a) ☐ This action is <b>FINAL</b> . 2b) ∑	This action is non-final.		
Since this application is in condition for all closed in accordance with the practice un Disposition of Claims			
4) Claim(s) 1-34 is/are pending in the application	ation.		
4a) Of the above claim(s) <u>5-10 and 14-34</u> is	s/are withdrawn from conside	ration.	
5) Claim(s) is/are allowed.			
6) Claim(s) 1-4 and 11-13 is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) 1-34 are subject to restriction and	/or election requirement.		
Application Papers			
9) ☐ The specification is objected to by the Exam	niner.		
10) The drawing(s) filed on is/are: a) □ a	ccepted or b) objected to by	he Examiner.	
Applicant may not request that any objection t	to the drawing(s) be held in abey	ance. See 37 CFR 1.85(a).	
11)☐ The proposed drawing correction filed on	is: a)☐ approved b)☐ d	lisapproved by the Examiner.	
If approved, corrected drawings are required i	n reply to this Office action.		
12) The oath or declaration is objected to by the	e Examiner.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for for	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)⊠ All b)□ Some * c)□ None of:			
1. Certified copies of the priority docum	nents have been received.		
2. Certified copies of the priority docum	nents have been received in A	pplication No	
<ul> <li>Copies of the certified copies of the application from the Internationa</li> <li>See the attached detailed Office action for a</li> </ul>	l Bureau (PCT Rule 17.2(a)).		
14) Acknowledgment is made of a claim for dom	·		
a) The translation of the foreign language	provisional application has b	een received.	
15) Acknowledgment is made of a claim for dom Attachment(s)	resuc priority under 35 U.S.C	33 120 aliu/01 121.	
1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413) Paper No(s)	
<ul> <li>Notice of References Cited (P10-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No</li> </ul>	) 5) Notice of	Informal Patent Application (PTO-152)	
N. P. L. C.			

Application/Control Number: 09/722,644

Art Unit: 1725

### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election of Group Ia, Claims 4, 12, and 13 in Paper No. 12 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (4,499,362) in view of Oprysko et al. (4,727,234). With respect to Claims 1 and 2, Martin teaches a laser working apparatus for effecting optical ablating working by irradiating a work article with a laser light from a laser oscillator capable of continuous emission of a light pulse of a large energy density in space and time (Column 2, Lines 10-20); with a pulse emission time not exceeding 1 picosecond (Figure 4, Item 10). Oprysko et al. teach a control means for controlling the irradiation of the laser light is provided in a position not affecting the temperature control of the laser oscillating portion (Figure 2, item 118) and a configuration is provided for controlling the irradiation of the laser oscillator by the control means to effect optical ablation

Application/Control Number: 09/722,644

Art Unit: 1725

working on the article and wherein the control means is provided outside the chamber (Figure 2, item 118). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Martin to utilize a computer in order to automate the laser manufacturing process (see Oprysko et al. Column 1, Lines 15-25).

With respect to Claim 3, the teachings of Martin and Oprysko et al. are the same as relied upon in the rejection of Claims 1 or 2. Oprysko et al. teach the control means is a light intercepting device capable of transmitting or intercepting the laser and a configuration is provided for irradiating the work article with a predetermined number of pulses by the light intercepting device (Column 4, lines 40-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Martin to utilize a computer in order to automate the laser manufacturing process (see Oprysko et al. Column 1, Lines 15-25).

With respect to Claim 4, the teachings of Martin and Oprysko et al. are the same as relied upon in the rejection of Claims 3. Martin teaches the use of an electromagnetic chopper (Figure 4, Item 10).

With respect to Claim 11, the teachings of Martin and Oprysko et al. are the same as relied upon in the rejection of Claims 1 or 2. Martin teaches the use a controlm eans arranged by a light interception control device capable of repeating the transmission and interception of the transmitting light with a frequency smaller than the consecutive light pulses emitted from the laser oscillator and a configuration is provided for irradiating the work article with the

Application/Control Number: 09/722,644

Art Unit: 1725

consecutive light pulses at a predetermined interval by the light interception control device, thereby effecting optical ablation working (Figure 4, items 10, 40, and 75).

With respect to Claim 12, the teachings of Martin and Oprysko et al. are the same as relied upon in the rejection of Claim 11. Martin teaches the light rotary device is a mechanical rotary chopper (Figure 4, 401).

With respect to Claim 13, the teachings of Martin and Oprysko et al. are the same as relied upon in the rejection of Claim 12. Martin teaches the time ratio of transmission and interception of the light by the mechanical rotary chopper is set by the same of a shielding plate of the mechanical rotary chopper (Figure 4, Item 403).

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Art Unit: 1725

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

jj () () April 14, 2003

FOM DUNN
SUPERVISORY PATENT EXAMINED
TECHNOLOGY CENTER 1700